PLATE X IV.

ILLUSTRATIONS OF SOME GENERA BELONGING TO THE FAMILY CICADIDÆ.

In the later works of Latreille the species of the genus Cicada, as restricted by Olivier to the well-known musical species (or the Tettigonia of Fabricius), were proposed to be divided into two genera, viz., Cicada, in which the musical apparatus of the males is concealed by plates; and Tibicen, in which the first segment of the abdomen exhibits on the upper side two slits exposing this apparatus, composed of C. hæmatodes, Oliv., and some other species. All these insects are at once distinguished from the remainder of the Linnæan Cicadæ by having three ocelli on the crown of the head, and antennæ composed of at least six joints.

Dr. Burmeister, in the volume of his valuable "Handbuch der Entomologie" treating upon the Linnæan Hemiptera, has not adopted the arrangement of Latreille, but unites all the Cicadæ into one genus distributed into various divisions and subdivisions; to one of the latter of which, composed entirely of American species, he has applied the name of Tibicen, with the character "Fusse zweigliedrig," whilst C. hæmatodes (the true type of Latreille's proposed genus), and other species having the tarsi 3-jointed, he has arranged in other divisions. Dr. Burmeister has also described a new and most interesting insect, under the name of

HEMIDICTYA FRONDOSA (Plate 24, fig. 3),

constituting the passage between the typical Fulgoræ and the true Cicadæ, agreeing with the former in having the hind part of the fore wings very much reticulated, and with the latter in having the basal portion like parchment, and with very few veins. The species is a native of Brazil, the unique specimen in the Royal Museum of Berlin having been collected by Langsdorf, in the neighbourhood of Rio. The accompanying figure is from a slight sketch made by myself, at Berlin, in 1835, from the specimen in question. It is not so precise in its details as I could have wished, but is correct in its general character. With the exception of this and the species described below, we find the veins of the fore wings in all the Cicadæ thus distributed:—A simple vein is emitted from the place of the stigma, beyond which another much shorter, also simple, vein is perceived. The mediastinal vein is united with the costa. The postcostal vein is

furcate at a short distance from the base of the wing, each furcation also becoming furgate beyond the middle of the wing; the median vein is single, but emits a branch, which runs to the extremity of the anal vein; a few short transverse or oblique veins connect several of these longitudinal veins together, forming but a very small number of cells.

There is, however, a fine species which inhabits Nepaul (where it was discovered by the late Major-General Hardwicke), and other parts of India, which although agreeing with the typical Cicadæ in general form and structure, has the fore wings very much reticulated, the postcostal and median veins being multifurcate, not only in the apical part, but also in the more coriaceous basal portion, the furcations being frequently united by short transverse veins. In the formation of the musical apparatus of the male and its opercula, this species does not differ from C. fasciata; but on account of the difference which it exhibits in the structure of its wings from the true Cicadæ, I have regarded it as a distinct sub-genus, under the name of-

POLYNEURA DUCALIS, Westw. (Plate 24, fig. 2.)

C. (P.) nigra, pronoti marginibus antico et postico (latiori) flavidis; alis anticis brunneis flavo-venosis, posticis fulvis; pedibus nigris femoribus (nisi apice) rufis. Long. corp.

unc. 1½. Expans. alar. ant. unc. 4¼.

Mus. Brit. Hope. Westw. (Inhabits the East Indies.)

A figure of this insect, with the wings expanded, has been published in Jardine's Naturalist's Library (Introduction to Entomology, pl. 18, fig. 1).

The two insects above described agree in having the basal portion of the forewings separated from the apical and more membranaceous part. The remaining insect, figured in plate 24, differs from them both in having homogeneous fore wings, although in the slight veining of the basal part of these wings, and the somewhat hexagonally areolated apical part, it agrees with Hemidictya.

I am indebted to J. Curtis, Esq., F.L.S., for a knowledge of this interesting Australian novelty, by whom it has been proposed to be named-

CYSTOSOMA SAUNDERSII. (Plate 24, fig. 1, and details.)

Caput parvum, antennæ mutilatæ. Promuscis ad basin femorum intermediorum extensa. Pro-et meso-thoracisdorsum fere ut in Cicada maculata formatum. Epimera metathoracica mediocria, medium segmenti basalis abdominis infra haud tegentia (fig. 1 e). Tympana musicalia lateralia (fig. 1 d), omnino detecta valde convexa, transverse striata. Abdomeni mais maximum valde inflatum, organa genitalia maris parva exserta (fig. 1 a, segmenta apicalia abdominis infra visa; 1 b, genitalia subtus; 1 c, eadem e latere visa). Pedes breves. Alæ anticæ homogeneæ, subopacæ ultra medium valde subhexagonaliter arcolatæ.

C. Saundersii. Pallide lutea costa alarum anticarum albida. Long. corp. fere unc. 2.

Expans, alar, unc. 3\frac{3}{3}. Mus. Curtis. (Inhabits New Holland.)

The plant is the Lobelia hypocrateriformis R. Br., a native of the South Coast of New Holland. Lob. ramosa Benth. (figured in my second plate under the name of L. gracilis) is a native of Swan River, whence it was introduced in 1837.